REMARKS

The Examiner has objected to the depiction of numeral "77" in Fig. 15 as there is no discussion with respect to Fig. 15 relating to this numeral and the referenced element. The numeral is in fact numeral 11, not 77. However, as the discussion in the specification relating to Fig. 15 does not discuss the element referenced by numeral 11, this numeral has been deleted from Fig. 15. A replacement sheet is submitted herewith to reflect deletion of numeral 11 and its reference line. Entry of the replacement sheet is respectfully requested.

The Examiner has objected to the title. By the above amendment, the suggested title has been substituted.

Claim 4 has been objected to in view of a misspelling. This misspelling has been corrected in the amendment to claim 4.

Claims 1-6, 8-12, 14, 20, 39, 40 and 45 have been rejected as reciting subject matter anticipated by teachings contained in the Yoshikawa et al. published application (application '170).

Claim 1 has been amended to incorporate the subject matter of claims 1 and 2; more particularly, an electrically conductive medium proximal to said conductors has been added along with the recitation of a means adapted to locally modify the capacitive environment

between a subset of the conductors and the electrically conducted medium is adapted to locally modify the capacitive environment without distortion of the conductive medium. These amendments have been made to more particularly point out and distinctly claim the invention and support exists on page 25, lines 1 to 8.

Applied application '170 discloses a digitizing tablet to control the vibration of an operation panel or a support substrate. Fig. 1 illustrates an insulating sheet (8) which acts as a capacitive dialectric to allow the row of electrodes (7) to couple. More specifically, reference is made to paragraph 56 of the application. In summary, application '170 does not disclose an electrically conducted medium adapted to locally modify the capacitive environment between a subset of conductors.

As indicated throughout the specification of the present application, the function of the "conductive layer" 4 is to allow capacitive variations induced by, for example, the proximity of a finger to propagate directly via the conductive layer. The influence of the conductive layer is constrained to a region of the touch screen corresponding to only a number of the first and second series of conductors 2, 3. As set forth in the introduction on page 3, line 12, the present invention is directed toward "altering the immediate capacitive environment of a subset on the first and second series of conductors". The following disclosure teaches a number of ways of accomplishing this result.

First, as described on page 9, lines 14 and 15, to achieve this effect a continuous layer or conductive medium 4 is provided in which "the conductive medium preferably has a resistivity in the range of 100 ohms per square to 10 million ohms per square. A desired resistivity of the conductive medium depends on the inter-conductor spacing between the sensing conductors".

Secondly, a doped support medium 4A can be used as shown in Fig. 5 and others in which "the spread of the capacitive signal can be controlled by preselecting the resistivity or the internal capacitive coupling of the doped medium" (note page 15, lines 7-17).

Thirdly, the conductive layer may comprise portions of difference conductivity, including portions of no conductivity (page 12, lines 9-10).

In conclusion, claim 1 has been amended to include the subject matter of claims 2 and 3 and, specifically, "the touch pad further comprising an electrically conducted medium proximal to said conductors to concentrate electric field between conductors towards the plane of the supporting medium and adapted to locally modify the capacitive environment between a subset of the conductors".

One must therefore come to the conclusion that the teachings set forth in application '170 neither teaches nor suggests the general techniques described above nor the features set forth in claim 1. As a rejection under 35 U.S.C. 102 requires that each and every element recited in a claim be incorporated in an applied reference, this requirement is not met. Accordingly,

withdrawal of the rejection of claim 1 is respectfully requested.

As each of claims 2-6, 8-12, 14, 20, 39, 40 and 45 depend directly or indirectly from claim 1 and as claim 1 is allowable, these dependent claims must also be allowed.

Claim 7, 13, 16-19, 21-27 and 38 have been rejected as reciting subject matter obvious over certain teachings contained in the application '170 in view of further teachings contained in Vranish application '977 (application '977).

The above discussion relating to application '170 is incorporated herein for the sake of brevity.

Application '977 discloses a three dimensional interactive display system having a transparent capaciflector (TC) camera formed on a transparent shield layer on the screen surface. While the teachings in this application do not appear particularly relevant to the presently claimed invention, it does disclose that "a 96% transparent shield film of Indian tin oxide ... 1000 ohms per square, is formed on the base surface 142" (see paragraph 32), the shield film is not used to locally modify the capacitive environment between a subset of conductors.

As pointed out above, claim 1 recites significant structure totally absent from any teaching or suggestion in application '170. These recited elements also are not taught in application '977.

Each of claims 7, 13, 16-19-21-27 and 38 depend directly or indirectly from claim 1. As set forth above, claim 1 recites subject matter not anticipated by the teachings set forth in application '170. In the present rejection, the application '977 is recited only with respect to subject matter in certain of the claims depending from claim 1. Whether or not application '977 teaches the recitations in one or more of the rejected dependent claims is not sufficient to support a rejection of such claims as they all depend from claim 1 that recites subject matter not taught in nor obvious over the primary reference, application '170.

Accordingly, withdrawal of the rejection of dependent claims 7, 13, 16-19, 21-27 and 28 is respectfully requested.

Claims 15, 28-37 and 41 have been rejected as reciting subject matter obvious over certain teachings contained in application '170 in view of further teachings contained in the Tanaka et al. application (application '364).

The above discussion relating to the scope and content of teachings set forth in application '170 is incorporated herein.

Application '364 is recited in support of disclosing certain elements set forth in the rejected claims, each of which claims depends directly or indirectly from claim 1. There is no suggestion set forth by the Examiner that application '364 suggests or discloses the subject

matter recited in claim 1 different from and absent from any teachings in application '170.

It is to be noted that application '364 discloses an inner type touch panel not particularly relevant to the function and operation of the present invention. That is, teachings therein do not relate to capacitive touch sensors and therefore do not disclose a touch pad that is relevant to the subject matter recited in claim 1. In the light most favorable to the position taken by the Examiner, application '364 may or may not teach the recitations contained in one or more of these rejected dependant claims. However, application '354 does not address, suggest or even intimate the structure and operation recited in claim 1 which is different and absent from the teachings set forth in application '170.

One must therefore come to the inescapable conclusion that it would be impossible for one skilled in the art to combine any teachings from each of application '170 and application '364 to develop the present invention recited in claim 1 and the claims depending directly or indirectly therefrom. Accordingly, withdrawal of the rejection of dependent claims 15, 28-37 and 41 is respectfully requested.

Claims 42 and 44 have been rejected as reciting subject matter obvious over certain teachings contained in application '170 in view of further teachings contained in the Lin patent (Lin '868).

The above discussion of the teachings set forth in application '170 and the deficiencies of

such teachings with respect to claim 1 are incorporated herein. It is to be noted that claims 42 and 44 depend either directly or indirectly from claim 1.

The Lin '868 is cited only for a purported teaching of a sensing circuit comprising a touch detective circuit and a wake up circuit. There is no suggestion in Lin '868 of the elements and functions recited in claim 1 and absent from the disclosure in application '170. Without such teaching or even suggestion, it would be impossible to derive the invention recited in claim 1. Accordingly, the subject matter recited in claims 42 and 44 could not be considered obvious over any combination of teachings contained in application '170 and the Lin '868. Withdrawal of the rejection of claims 42 and 44 is respectfully requested.

Claim 43 has been rejected as reciting subject matter obvious over certain teachings contained in application '170 in view of further teachings contained in Lin '868 and yet further teachings contained in Files's patent number 5,657,053 (Files '053). This rejection is predicated upon the alleged obviousness of the subject matter recited in claim 42 based upon application '170 and Lin '858. For reasons set forth above, claim 42 can not be considered obvious in view of these teachings. The further teaching relied upon in Files '053 relates to a detection time.

Since claim 43 depends from claim 42 which depends from claim 41 and as neither claim 41 not claim 42 is anticipated by or obvious over applied references (application '170 and Lin '868), the further teaching of Files '053 relating to detection time is irrelevant.

Accordingly, withdrawal of the rejection of claim 43 is respectfully requested.

In view of the amendments to the drawings, the change in title, the amendments to the claims to more particularly point out and distinctly claim the invention and the discussion of the paucity of teachings of the applied references, it is believed that the application is in condition for allowance, which allowance is respectfully requested.

Respectfully submitted,

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